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conclude
mimetic thereof or capable of hybridizing to SEQ ID NO:1 under low stringency conditions or a derivative, homolog, analog, chemical equivalent or mimetic of said nucleic acid molecule.

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6. (Amended) An isolated nucleic acid molecule according to claim 2 wherein said protein has the characteristics of Csl or a functional equivalent thereof.

7. (Amended) An isolated nucleic acid molecule according to claim 2 wherein said protein comprises the amino acid sequence substantially as set forth in SEQ ID NO:4.

8. (Amended) An isolated nucleic acid molecule according to claim 2 comprising a nucleotide sequence substantially as set forth in SEQ ID NO:3.

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11. (Amended) An isolated nucleic acid molecule according to claim 2 wherein said protein comprises the amino acid sequence substantially as set forth in SEQ ID NO:5.

12. (Amended) An isolated nucleic acid molecule according to claim 2 comprising a nucleotide sequence comprising exon regions of which five comprise:

Exon 1 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:6;

Exon 2 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:7;

Exon 3 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:8;

Exon 4 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:9; and

Exon 5 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:10,

or capable of hybridizing to a genomic sequence comprising said exon regions under low stringency conditions or a derivative, homolog, analog, chemical equivalent or mimetic of said nucleic acid molecule.

BY 16. (Amended) An isolated protein comprising an amino acid sequence substantially as set forth in SEQ ID NO:2 or a derivative, homolog or mimetic thereof or having at least about 45% or greater similarity to SEQ ID NO:2 or a derivative, homolog, analog, chemical equivalent or mimetic of said protein.

17. (Amended) An isolated protein according to claim 16 encoded by a nucleotide sequence substantially as set forth in SEQ ID NO:1 or a derivative, homolog or mimetic thereof or capable of hybridizing to SEQ ID NO:1 under low stringency conditions or a derivative, homolog, analog, chemical equivalent or mimetic of said protein.

B 18. (Amended) An isolated protein according to claim 16 wherein said protein has the characteristics of Csl or a functional equivalent thereof.

20. (Amended) An isolated protein according to claim 16 comprising an amino acid sequence substantially as set forth in SEQ ID NO:4.

21. (Amended) An isolated protein according to claim 16 encoded by a nucleotide sequence substantially as set forth in SEQ ID NO:3.

22. (Amended) An isolated protein according to claim 16 encoded by a nucleotide sequence comprising exon regions of which five comprise:

Exon 1 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:6;

Exon 2 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:7;

Exon 3 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:8;

Exon 4 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:9; and

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attached

Exon 5 comprising a nucleotide sequence corresponding to the nucleotide sequence substantially as set forth in SEQ ID NO:10,
or capable of hybridizing to a genomic sequence comprising said exon regions under low stringency conditions or a derivative, homolog, analog, chemical equivalent or mimetic of said protein.

25. (Amended) An isolated protein according to claim 16 comprising an amino acid sequence substantially as set forth in SEQ ID NO:5.

26. (Amended) An isolated protein according to claim 16 which protein is a homodimer.

27. (Amended) An isolated protein according to claim 16 which protein is a heterodimer.

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31. (Amended) A method of modulating muscle cell functional activity in a mammal, said method comprising administering to said mammal an effective amount of a protein according to claim 16 or a derivative, homolog, analog, chemical equivalent or mimetic thereof for a time and under conditions sufficient to modulate the functional activity of said muscle cell.

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34. (Amended) A method of modulating muscle cell functional activity in a mammal, said method comprising administering to said mammal an effective amount of a nucleic acid molecule according to claim 2 or a derivative, homolog, analog, chemical equivalent or mimetic thereof for a time and under conditions sufficient to modulate the functional activity of said muscle cell.

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37. (Amended) A method of modulating cellular functional activity in a mammal, said method comprising administering to said mammal an effective amount of a protein according to claim 16 or a derivative, homolog, analog, chemical equivalent or mimetic thereof

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for a time and under conditions sufficient to modulate the activity of one or more components of the calcineurin-dependent signaling pathway.

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40. (Amended) A method of modulating cellular functional activity in a mammal, said method comprising administering to said mammal an effective amount of a protein according to claim 2 or a derivative, homolog, analog, chemical equivalent or mimetic thereof for a time and under conditions sufficient to modulate the activity of one or more components of the calcineurin-dependent signaling pathway.

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48. (Amended) A method of treating a mammal, said method comprising administering to said mammal an effective amount of a protein according to claim 16 or a derivative, homolog, analog, chemical equivalent or mimetic thereof for a time and under conditions sufficient to modulate muscle cell functional activity.

49. (Amended) A method of treating a mammal, said method comprising administering to said mammal an effective amount of a nucleic acid molecule according to claim 2 or a derivative, homolog, analog, chemical equivalent or mimetic thereof for a time and under conditions sufficient to modulate muscle cell functional activity.

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59. (Amended) An isolated antibody directed to the protein according to claim 16.

60. (Amended) An isolated antibody directed to the nucleic acid molecule according to claim 2.
